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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/931,846 | 08/17/2001 | Shuhua Guo | 14857 | 4558 |

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EXAMINER

SZEKELY, PETER A

ART UNIT

PAPER NUMBER

1714

DATE MAILED: 05/07/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

AS-8

| | | | |
|------------------------------|-------------------------------|----------------------------|--|
| Office Action Summary | Application No. 09/931,846 | Applicant(s) GUO ET AL. | |
| | Examiner Peter Szekely | Art Unit 1714 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 August 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 9, 11, 12, 15-26, 30, 32, 33 and 36 is/are rejected.
- 7) ☒ Claim(s) 5-8, 10, 13, 14, 27-29, 31, 34 and 35 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities: The specification repeatedly uses the word "compatilizer". There is no such word in the English language. The word occurs on page 3, line 26, on page 4, lines 3, 11 and 31, on page 7, lines 3, 6, 8, 18 and 26, on page 8, lines 2, 7, 10, 13, 19 and 24, on page 9, lines 1, 26, 30 and 31, on page 13, lines 6, 18, and 29, on page 14, line 31, on page 16, lines 1 and 14, on page 18, in Table 1, on page 19, in Table 4 and on page 20, in Table 5. Compatibilizer, maybe? Since the examiner may have missed some of the places where the word occurs, applicants are requested to double-check.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
3. Claims 1, 4, 12, 15-17, 19-22, 24-26, 32, 33 and 36 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
4. Claims 1, 4, 16, 17(3x), 19-22 and 25 contain the non-existent word "compatlizer". Claims 15 and 16 contain the indefinite word "derivative". Carbon dioxide is a derivative of phthalic aldehyde. It is derived by burning. Claim 16 claims a method under certain undefined conditions. Claims 24-26 claim a "process according to

Art Unit: 1714

anyone in..." "A process according to any one of..." maybe? Claims 12, 32 and 33 contain improper Markush language.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-3, 9, 11, 12 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Tanaka et al. 5,990,206.

7. Tanaka et al. disclose asphalt, organophosphorus acid, inorganic phosphorus compound, polyhydric alcohol and styrene-butadiene –styrene block copolymer in claims 1-6. The asphalt concentration is 70-99.9%. See column 3, line 50. For the concentration of the inorganic phosphorus compound, see column 5, lines 35-57. It is the crosslinking agent according to the paragraph overlapping columns 5 and 6. The hydroxyl group containing compounds are polar. They are listed in column 6, lines 24-64. Their concentration is shown in the paragraph overlapping columns 7 and 8. The organophosphorus compound, which is an acid is described in column 8, lines 21-51. Its concentration is shown in column 9, lines 36-54 as it is described as a compatibilizer in the paragraph overlapping columns 9 and 10. It fulfills the requirements for both the compatibilizer and the polar compound. The concentration of the SBS block copolymer can be calculated. For styrene content see Examples 1-3. Applicants' claims are not novel.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

10. Claims 1-3, 9, 11, 12, 16-24, 30, 32 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tanaka et al. 5,990,206.

11. The reference has been discussed already. The process is shown in the paragraph overlapping columns 10 and 11, column 11, lines 3-30 and in the claims. Since there is no superiority is claimed for any of the methods of mixing described in claims 16-24, 30, 32 or 33, the examiner holds that all methods claimed therein would have been obvious to one having ordinary skill in the art, at the time the invention was made.

Art Unit: 1714

Allowabl Subj ct Matter

12. Claims 5-8, 10, 13-14, 27-29, 31, 34 and 35 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter Szekely whose telephone number is (703) 308-2460. The examiner can normally be reached on 7:00 a.m-5:30 p.m. Tuesday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (703) 306-2777. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.



Peter Szekely
Primary Examiner
Art Unit 1714

P.S.
May 2, 2003